

## Task (1)

### Energy Transfer in the Water Cycle

School book page 7 – page 8



#### **A - Use the word bank to label each example with the correct part of water cycle**

(condensation – evaporation – precipitation – runoff)

- |   |   |   |
|---|---|---|
| 1- A shallow river dries up.                                    | ( | ) |
| 2- Snow falls on a cold afternoon                               | ( | ) |
| 3- Fog forms over a field in the morning                        | ( | ) |
| 4- Water in a river travel down a mountainside and into the sea | ( | ) |

#### **b. Complete the following sentences:**

1-The two basic factors of the water cycle are ..... energy and ..... force

2- When the sun heats up water in the oceans, it will .....

## Task (2)

### Water cycle model

School book page 11-14

Fill in the model by selecting the correct words to show what is happening during each step (words may be used more than once)



**a. you know that in order for a change in state to occur, energy must be either gained or lost, complete using words between brackets**

(condensation – clouds – gain – loss – gravity)

- 1- When water vapour ..... energy it changes into water
- 2- Water vapour loss energy and changes into water droplet in the form of ....
- 3- Force of ..... cause water falls to the earth
- 4- Changing of water vapor to liquid water called ..... process
- 5- When a liquid or gas ..... energy it expands and becomes less dense and rises upward

**b. Match each description of air motion and the process to indicate whether it is more likely to result in condensation or in evaporation**

- |  |   |   |
|--|---|---|
| 1- Warm air rises and moves over cooler mountains              | { | } |
| 2- Energy from the sun heats the top layer of water in the sea | { | } |
| 3- A puddle in a hot desert becomes smaller and smaller        | { | } |
| 4- Warm, moist air touches a cold glass of tea                 | { | } |

### Task (3)

#### Mountain Effects

School book page 23



**A. order the steps to describe the process that causes this phenomenon, which is known as a rain shadow**

- |                       |     |                                       |     |
|-----------------------|-----|---------------------------------------|-----|
| Air cools             | ( ) | Humid air encounters a mountain range | ( ) |
| Water vapor condenses | ( ) | Air dries the land                    | ( ) |
| Air rises             | ( ) | Air warms                             | ( ) |
| Precipitation occurs  | ( ) | Air descends                          | ( ) |

**B. Complete the following sentences from words between brackets to describe the properties at the top of mountains compared with those at the bottom**

**(the same – higher – lower )**

At the bottom of the mountain	At the top of the mountain
Pressure – temperature – density .....	Pressure – temperature – density .....

### Task (4)

#### Tools for forecasting

School book page 30

**Meteorologists use different tools to study and forecast the weather**

1- **Device name:** .....  
**Use:** .....



2- **Device name:** .....  
**Use:** .....



3- **Device name:** .....  
**Use:** .....



4- **Device name:** .....  
**Use:** .....



5- **Device name:** .....  
**Use:** .....





## Task (5)

### Different Environments, and different characteristics

School book page 47 , 51

**A - Think about what you have already learned about environments with different climatic characteristics and their effect on animal, How animals adapt to these environments?**

#### 1- Emperor penguin



Environment: .....  
Structural adaptation: .....

#### 3- Poison dart frog



Environment: .....  
Structural adaptation: .....

#### 2- African penguin



Environment: .....  
Structural adaptation: .....

#### 4- Lizard



Environment: .....  
Structural adaptation: .....

### B - Mention the reasons of bird migration?



## Task (6) Soil formation

School book page 63- 69

**A - Soil is all around us, but where does soil come from? think about the importance of soil and what role soil plays in the environment?**

.....

.....

.....

.....



**b. Classify the following ingredients into inorganic ingredients and organic ingredients**

**(insects – worms – water – remains of dead plants – air – rocks – bacteria)**

inorganic ingredients	organic ingredients
.....	.....

**C - Complete using words between brackets: -**

**(low – wet – dry – high – mosquitoes – lions)**

	Sand soil	soil in a bog
properties	.....	.....
Retaining water	.....	.....
animals	Gazelles and .....	Frog and .....

## Task (1)



### Energy Transfer in the Water Cycle

School book page 7 – page 8



#### A - Use the word bank to label each example with the correct part of water cycle

(condensation – evaporation – precipitation – runoff)

- 1- A shallow river dries up.
- 2- Snow falls on a cold afternoon
- 3- Fog forms over a field in the morning
- 4- Water in a river travel down a mountainside and into the sea

evaporation  
precipitation  
condensation  
runoff

#### b. Complete the following sentences:

1-The two basic factors of the water cycle are thermal energy and gravity force.

2- When the sun heats up water in the oceans, it will evaporate

By – Mrs . Amira Ahmed



## Task (2)

### Water cycle model



School book page 11-14

Fill in the model by selecting the correct words to show what is happening during each step



a. You know that in order for a change in state to occur, energy must be either gained or lost, complete using words between brackets

**(condensation – clouds – gain – loss – gravity)**

- 1- When water vapour **loss** energy it changes into water
- 2- Water vapour loss energy and changes into water droplet in the form of **clouds**
- 3- Force of **gravity** cause water falls to the earth
- 4- Changing of water vapor to liquid water called **condensation** process
- 5- When a liquid or gas **gain** energy it expands and becomes less dense and rises upward

b. Match each description of air motion and the process to indicate whether it is more likely to result in condensation or in evaporation

- |  |                     |
|--|---------------------|
| 1- Warm air rises and moves over cooler mountains              | <b>condensation</b> |
| 2- Energy from the sun heats the top layer of water in the sea | <b>evaporation</b>  |
| 3- A puddle in a hot desert becomes smaller and smaller        | <b>evaporation</b>  |
| 4- Warm, moist air touches a cold glass of tea                 | <b>condensation</b> |

By – Mrs . Amira Ahmed



Task (3)

Mountain Effects



School book page 23



**A. order the steps to describe the process that causes this phenomenon, which is known as a rain shadow**

- |                       |   |                                       |   |
|-----------------------|---|---------------------------------------|---|
| Air cools             | 3 | Humid air encounters a mountain range | 1 |
| Water vapor condenses | 4 | Air dries the land                    | 8 |
| Air rises             | 2 | Air warms                             | 7 |
| Precipitation occurs  | 5 | Air descends                          | 6 |

**B. Complete the following sentences from words between brackets to describe the properties at the top of mountains compared with those at the bottom**

**(the same – higher – lower )**

**At the bottom of the mountain**

**At the top of the mountain**

Pressure – temperature – density

Pressure – temperature – density

**higher**

**lower**

By – Mrs . Amira Ahmed

### Task (4)

#### Tools for forecasting



School book page 30

Meteorologists use different tools to study and forecast the weather

1- Device name: Anemometer

Use: measure wind speed



2- Device name: rain gauge

Use: measure the amount of rain in a certain area



3- Device name: barometer

Use: measure atmospheric pressure



4- Device name: satellite

Use:

- it transmit data from the satellite or station to meteorologists .
- it detect the possible path of the hurricane .



5- Device name: thermometer

Use: measure temperature



By – Mrs . Amira Ahmed

## Task (5)



### Different Environments, and different characteristics

School book page 47 , 51

**A - Think about what you have already learned about environments with different climatic characteristics and their effect on animal, How animals adapt to these environments?**

#### 1- Emperor penguin



Environment: Antarctic  
Structural adaptation: Fatty layer and its skin is covered with dense feathers

#### 2- African penguin



Environment: coast of South Africa  
Structural adaptation: circle of skin doesn't have any feathers around its eyes

#### 3- Poison dart frog



Environment: tropical rain forest  
Structural adaptation: colorful poisonous skin

#### 4- Lizard



Environment: desert  
Structural adaptation: its body covered with sandy – colored scales

### B - Mention the reasons of bird migration?

- 1 - To search for food resources .
- 2 - To find suitable habitat that help them to reproduce.



By – Mrs . Amira Ahmed



## Task (6)

### Soil formation



School book page 63- 69

**a - Soil is all around us, but where does soil come from? think about the importance of soil and what role soil plays in the environment?**

The soil has an important role to determine the type of plants that can grow in it, and also affects the species of animals which live in this environment



**b. Classify the following ingredients into inorganic ingredients and organic ingredients**

(insects – worms – water – remains of dead plants – air – rocks – bacteria)

inorganic ingredients	organic ingredients
<u>Water – air - rocks</u>	<u>insects – worms - remains of dead plants - bacteria - worms</u>

**C - Complete using words between brackets: -**

(low – wet – dry – high – mosquitoes – lions)

	Sand soil	soil in a bog
properties	<u>dry</u>	<u>Wet</u>
Retaining water	<u>low</u>	<u>high</u>
animals	Gazelles and <u>lions</u>	Frog and <u>mosquitoes</u>

By – Mrs . Amira Ahmed